

Claims

- 9/2/04
- [c1] An improved large bandwidth high frequency amplifier having a feedback loop comprising:
- at least one input terminal, said input terminals supplying ^{an} ~~a~~ input signal (V_{in});
 - at least one output terminals, said output terminals supplying an amplified differential output signal (V_{out}) as a function of the input signal;
 - an input matching circuit;
 - a first isolation circuit;
 - an amplification section, wherein said input matching circuit, first isolation circuit and amplification section are connected in series in a direct amplification line, said amplification section having at least one large bandwidth low gain differential amplifier capable of generating said amplified output signal; and,
 - a parallel feedback circuit consisting of a first feedback amplifier, an RC network, and a second isolation circuit connected in series, said parallel feedback circuit positioned between said output terminals and the amplification section inputs.

- [c2] The improved amplifier of claim 1 wherein said first iso-